

20-8082 Re-print

157980
(5.8)

5007175
(6.5)

6:40 8:35



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D3319-1

Job Sheet 167108



Part No: D3319-1

Job Qty: 16 ea

Part Name: Forward Wearplate



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/24/17

Job Tracking No:

Due Date: 10/31/17

Created By: Mario Poulin

Type: Stock

Description:

Customer: Heliswiss Iberica SA (CHELI02)

Hangar 4, Lado Norte, Aeropuerto De Sabadell, Barcelona Sabadell, 08205 Spain ph:011 34 93 720 6090
fx:34-937-100130.

Note: IPP: B 05.10.14 Added step 9, dwg rev B KJ/EC IPP Rev:C Now on Waterjet 06-10-26 JLM IPP REV:D
17.10.25 AS PER DWG REV.D DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	16 Ea	10/30/17	10/30/17	0.00	0.00	Start Up Large Fab-1		SR
100	Waterjet	16 pcs	10/30/17	10/30/17	0.00	1.67	Waterjet1		SC DAS
120	QC	16 pcs	10/30/17	10/30/17	0.00	0.00	QC8		38
140	Brake NC	16 pcs	10/30/17	10/30/17	0.07	1.16	Brake NC 1		38 DAS-PP
150	QC	16 pcs	10/30/17	10/30/17	0.00	0.00	QC5		38
160	Autoweld 1	16 pcs	10/30/17	10/30/17	0.00	4.11	Large Fab 6		DAS BC
170	QC	16 pcs	10/30/17	10/30/17	0.00	0.00	QC10		38 DAS
180	QC	16 pcs	10/30/17	10/30/17	0.00	0.00	QC5		38
190	SprayPaint	16 pcs	10/31/17	10/31/17	0.00	0.37	Powdercoat3		AB DEC 13 2017
200	QC	16 pcs	10/31/17	10/31/17	0.00	0.00	QC3		17-12-1424
210	Packaging	16 pcs	10/31/17	10/31/17	0.00	0.00	Packaging3		
220	QC21-SA	16 Ea	10/31/17	10/31/17	0.00	0.00	QC21		DEC 14 2017

Part Op 100 - 1-Cut as per Dwg D3319 Dwg Rev: D Prog Rev: D 2-Deburr if necessary
Descriptions: 140 - 1- Form using DT8326 & DT8261 as per Dwg D3319Rev: _____ 2- Form flat on press using DT8776 block
160 - 8259 HARDCOAT B: 138629
190 - COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURE COATING AS PER DWG NOTE 9 SHEET ONE.
BATCH: 138637
210 - Identify on inside surface using a permanent fine point marker with the following: TCCA-PDA, Dart Aerospace Ltd.
P/N: D3319-1, B/N: BXXXXX For Product Eligibility see PDA05-18 and Stock Location: _____

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	M7010S18GA	10	35	0	0

M304S18GA

APL
17/12/05

Part Specifications					
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Wearplate	4.980inches $\pm$ 0.030	5.010 4.950		
2	Wearplate	1.600inches $\pm$ 0.010	1.610 1.590		
3	Wearplate	2.660inches $\pm$ 0.010	2.670 2.650		
4	Wearplate	3.190inches $\pm$ 0.010	3.200 3.180		
5	Wearplate	3.563inches $\pm$ 0.010	3.573 3.553		
6	Wearplate	4.710inches $\pm$ 0.030	4.740 4.680		
7	Wearplate	0.600inches $\pm$ 0.030	0.630 0.570		
8	Wearplate	10.576inches $\pm$ 0.010	10.586 10.566		
9	Wearplate	11.942inches $\pm$ 0.010	11.952 11.932		
10	Wearplate	18.090inches $\pm$ 0.030	18.120 18.060		
11	Wearplate	0.316inches + 0.006 - 0.001	0.322 0.315		
12	Wearplate	0.546inches $\pm$ 0.010	0.556 0.536		
13	Wearplate	0.316inches + 0.006 - 0.001	0.322 0.315		
14	Wearplate	0.670inches $\pm$ 0.010	0.680 0.660		
15	Wearplate	0.190inches + 0.005 - 0.001	0.195 0.189		
16	Wearplate	3.815inches $\pm$ 0.010	3.825 3.805		
17	Wearplate	16.100inches $\pm$ 0.010	16.110 16.090		

Plex 12/4/17 8:39 AM dart.lacelle.linda

DART AEROSPACE LTD		Work Order: 167108
Description: Forward Weorplate		Part Number: 3319-1
Inspection Dwg: 3319	Rev: D	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4,980	$\pm 0,030$	4,976			VDX-00	
2,600	$\pm 0,010$	2,603			Tape	
2,600	$\pm 0,010$	2,606				
3,190	$\pm 0,010$	3,197				
3,563	$\pm 0,010$	3,564				
4,710	$\pm 0,010$	4,704				
0,600	$\pm 0,010$	0,604				
10,576	$\pm 0,010$	10,58				
11,942	$\pm 0,010$	11,945				
18,090	$\pm 0,010$	18,090				
0,316	$\pm 0,006 - 0,001$	0,318				
0,546	$\pm 0,010$	0,548				
0,316	$\pm 0,006 - 0,001$	0,319				
0,670	$\pm 0,010$	0,673				
0,190	$\pm 0,005 - 0,001$	0,191				
3,815	$\pm 0,010$	3,817				
16,100	0,010	16,101				
0,050	$\pm 0,010$	0,048				

Measured by: SC	Audited by: 38	Preliminary Approval:
Date: 17/12/05	Date: DEC 06 2017	Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

DQA: _____ Date: _____

QA Closed: OKDate: Apr 17/2020**WORK ORDER NON-CONFORMANCE / UPDATE**Work Order update only ☐

Work Order: <u>167108</u> Part No. <u>D3319-1</u> NCR No. <u>20-8082</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging Supplier ☐ Engineering ☒ Quality ☐ Other ☐																																																																																																							
Date: <u>17/12/13</u>		Step #: <u>150</u>		QTY Effective: <u>16</u>		MRB (QSI042) Approval DAS 12 9-89 <u>17/12/13</u>																																																																																																					
Description Work Order Deviation Applying Axalta cohesion promoter is time consuming. Testing by ENG. indicated that Axalta provides no measurable benefit. Both treated & untreated weepholes held equally well after several days of submersion submersion.				Disposition Acceptable to <u>not</u> use Axalta cohesion promoter on weepholes. <u>AL</u> DEC 13 2017				Completed By DAS 12 9-89 <u>17/12/13</u> Lead hand / Supervisor Approval Verification <u>AL 19-07-11</u> QC / QA Coordinator Approval DAS 55 9-89 <u>MAR 23 2020</u>																																																																																																			
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="4" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td>Environment</td><td>☐</td> <td>No Re-verification</td><td>☐</td> <td>Pressure/Forced</td><td>☐</td> <td>Temperature/Cure</td><td>☐</td> </tr> <tr> <td>Design</td><td>☐</td> <td>Operator</td><td>☐</td> <td>Bending</td><td>☐</td> <td>Set-up</td><td>☐</td> </tr> <tr> <td>Doc/Data</td><td>☐</td> <td>Offset/Setup</td><td>☐</td> <td>Centre Not Concentric</td><td>☐</td> <td>BOM/Route</td><td>☐</td> </tr> <tr> <td>Equip/Tooling</td><td>☐</td> <td>Supplier</td><td>☐</td> <td>Cracks</td><td>☐</td> <td>Broken/Damage/Defect</td><td>☐</td> </tr> <tr> <td>Handling/Pre</td><td>☐</td> <td>Training</td><td>☐</td> <td>Crimp/Kink/Ripple/Wave</td><td>☐</td> <td>Inspection Incomplete/Unqualified</td><td>☐</td> </tr> <tr> <td>Material</td><td>☒</td> <td>Use for Testing</td><td>☐</td> <td>Cuffs</td><td>☐</td> <td>Contamination</td><td>☐</td> </tr> <tr> <td>Internal Transport</td><td>☐</td> <td>Poor Information</td><td>☐</td> <td>Crushing</td><td>☐</td> <td>Countersink</td><td>☐</td> </tr> <tr> <td>Tribal Knowledge</td><td>☐</td> <td>Rushing</td><td>☐</td> <td>Heat Treat</td><td>☐</td> <td>Cut Too Short</td><td>☐</td> </tr> <tr> <td>LOA</td><td>☐</td> <td>Product Improvement</td><td>☐</td> <td>Wave/Twist in Tube</td><td>☐</td> <td>Instructions Incomplete/Unclear</td><td>☐</td> </tr> <tr> <td>Substation</td><td>☐</td> <td>Process Improvement</td><td>☐</td> <td>Marks/Chatter</td><td>☐</td> <td>Drill Holes</td><td>☐</td> </tr> <tr> <td>Past Expiry Date</td><td>☐</td> <td>Manufacturing Process</td><td>☐</td> <td colspan="4" rowspan="2">OTHER: _____</td> </tr> <tr> <td>Misidentified</td><td>☐</td> <td>Past Due</td><td>☐</td> </tr> </tbody> </table>								Root Cause				FAULT CATEGORY				Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Design	☐	Operator	☐	Bending	☐	Set-up	☐	Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Material	☒	Use for Testing	☐	Cuffs	☐	Contamination	☐	Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Past Expiry Date	☐	Manufacturing Process	☐	OTHER: _____				Misidentified	☐	Past Due	☐
Root Cause				FAULT CATEGORY																																																																																																							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐																																																																																																				
Design	☐	Operator	☐	Bending	☐	Set-up	☐																																																																																																				
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐																																																																																																				
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐																																																																																																				
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐																																																																																																				
Material	☒	Use for Testing	☐	Cuffs	☐	Contamination	☐																																																																																																				
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐																																																																																																				
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐																																																																																																				
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐																																																																																																				
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐																																																																																																				
Past Expiry Date	☐	Manufacturing Process	☐	OTHER: _____																																																																																																							
Misidentified	☐	Past Due	☐																																																																																																								